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| EXAMINER | |
|---|---|
| TANG, KAREN C | |
| **ART UNIT** | **PAPER NUMBER** |
| 2151 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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| 3 MONTHS | 03/20/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/043,501 | MORAN ET AL. | |
| | Examiner | Art Unit | |
| | Karen C. Tang | 2151 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *13 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/8/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

- This action is responsive to the amendment and remarks file on 2/7/07.
- Claims 1-39 are amended are for further examination.

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 2/7/07 have been fully considered but they are not persuasive.

Applicant argued that the art of record Sharon does not teach the newly amended claims which comprising the added limitation in the independent claims ".and is configurable to a monitoring mode or a focus mode to monitor and collect data"

Examiner respectfully traversed the argument, Sharon, the cited art of record, teaches the media module/agent 12/software, which is configurable to a monitoring mode (refer to Col 6, Lines 45-67, Col 7, Lines 1-9) to perform the monitoring, analyzing and collect network traffic data (refer to Col 4, Lines 9-20). Agents are distributed throughout each segment of the network and collect and analyze traffic information (Col 5, Lines 15-25). It is being indicated that in Sharon, that the CME 12 (application server module) receive the information (collected data and analyzed data) from the agent 12 (Col 5, Lines 60-67, Col 7, Lines 10-25) and for configuring the at least one media module in response to the analyzed received data (triggers agents to collects more data in response to the received analyzed data, refer to Col 7, Lines 20-25, Lines 40-50).

Applicant argued that the combination of Sharon and Elliott is improper.

Examiner respectfully traversed the argument. Sharon disclosed methods of monitoring network traffic in order to analyze and maintain the flow of traffic. Elliott provides system and

methods and one of the functionality of the system is to monitoring the system platform in order to maintain the system platform. However, Ellicott provides more functionality in term of network monitoring, and one of the function is accounting while providing monitoring the network resources and data flows, Elliott further provides accounting functionality due to the needs to provides the measurement and reporting of resource utilization from the accounting perspective. There's a need to provide the accounting perspective data information. There's a need for Sharon to implement such functions from Elliott, not only can Sharon's system gaining information from each accounting information from each segment information in order to determined services being utilized at each segment, but easier for user to understand the physical topology of the network traffic flow due to the accounting information that varies from segment to segment. Therefore, there is suggest/motivation to combine the references of Sharon and Elliott.

Applicant has challenged the "Official Notice".

Due to the challenged, Examiner presents the art "Sistanizadeh" to demonstrate that ordinary skill in the art would be motivated to comprise the limitation that is being stated in the instant application.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

I. Claims 1-11, 13-16, 18, 21-30, 32, 33, 35, and 38 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Sharon et al hereinafter Sharon (US 6,137,782).

1. Referring to Claims 1, 23 and 39, Sharon indicates an application monitoring system (refer to abstract), comprising: (a) at least one media module (agent, network element, refer to Col 4, Lines 5-20, Col 3, Lines 40-67) coupled to an associated network segment (refer to Col 5, Lines 9-25) on which a network application is running (refer to Col 3, Lines 50-67), each media module is adapted and configurable (media module comprises agents which are configurable, refer to Col 5, Lines 10-25, Col 6, Lines 1-20, Col 7, Lines 40-67) for monitoring and collecting data relating to traffic (refer to Col 2, Lines 1-35) on the associated network segment corresponding to the network application (software packages, refer to Col 1, Lines 54-67) and for analyzing the collected data for traffic information (refer to Col 3, Lines 50-67 and Col 5, Lines 5-15), wherein each media module is tailored for network analysis (38, refer to Fig 2 and Abstract) and is configurable to a monitoring mode or a focus mode to monitor and collect data (refer to Col 6, Lines 45-67, Col 7, Lines 1-9) ; and (b) an application server module (CME, refer to Col 3, Lines 25-55) coupled to the at least one media module (network elements, agents, refer to Col 3, Lines 25-55) for receiving the collected data and the analyzed data (refer to Col 6, Lines 35-67 and Col 7, Lines 1-25) and the analyzing the data for improving the performance of the network application (software packages, refer to Col 1, Lines 50-67, Col 2, Lines 55-67; reducing the redundancy of collected data, refer to Col 5, Lines 5-25, which reduce unnecessary processing time by the CME) and for configuring the at least one media module in response to the analyzed received data (refer to Col 7, Lines 40-67).

2. Referring to Claims 2 and 24, Sharon indicates wherein the application server module (central communication server, 20, refer to Fig 1) provides (refer to Col 7, Lines 55-67) at least one of a user interface, provisioning, reports, alarms, statistics, and an SNMP agent (refer to Col 1, Lines 35-55).

3 Referring to Claims 3 and 25, Sharon indicates wherein the user interface (GUI 28, refer to Col 10, Lines 55-67) is accessible via Internet connection (refer to Col 8, Lines 10-25 and Col 10, Lines 14-65).

4. Referring to Claim 4, Sharon indicates wherein the at least one media module (agent, network element, refer to Col 4, Lines 5-20, Col 3, Lines 40-67) includes at least two media modules of different types (agents "D" and "C", receiving information, analyzing information, refer to Col 4, Lines 5-20 and Col 11, Lines 20-50).

5. Referring to Claims 5 and 27, Sharon discloses further comprising at least one additional media module (agent, network element, refer to Col 4, Lines 5-20, Col 3, Lines 40-67) that monitors network traffic not related to the network application (refer to Col 1, Lines 54-67).

6. Referring to Claim 6, Sharon indicates wherein multiple media modules (agent 14, refer to Fig 1) are coupled to a common chassis (CME, 12, refer to Fig 1).

7. Referring to Claim 7, Sharon indicates wherein the system is self-managed (automatic, refer to abstract).

8. Referring to Claim 8, Sharon indicates wherein the system is remotely upgradeable (it is inherent that software are upgradeable, refer to Col 2, Lines 55-67 and Col 1, Lines 54-67).

9. Referring to Claims 9 and 28, Sharon indicates wherein the application server module provides expert functions when analyzing the data (refer to Col 5, Lines 1-35 and Col 7, Lines 1-40).

10. Referring to Claim 10 and 29, Sharon indicates wherein the application server module (CME, refer to Col 3, Lines 25-55 and Col 5, Lines 40-67) performs a security analysis (topology mapping, which is inherent that it consists a security/reliability functions, refer to Col 5, lines 1-35) based on the data.

11.Referring to Claims 11 and 30, Sharon indicates wherein the application server module (CME , refer to Col 3, Lines 25-55, Col 5, Lines 40-67) performs policy management functions (topology mapping, which is inherent that it also indicates where the packets are routed to, refer to Col 5, lines 1-35) when analyzing the data.

12. Referring to Claim 14, Sharon indicates wherein the application server module detects, configures, manages and downloads software to the at least one media module (refer to Col 4, Lines 5-20, and Col 6, Lines 35-60).

13. Referring to Claim 22, Sharon indicates a computer program product for monitoring a network application (refer to Col 2, Lines 25-55), comprising:
(a) computer code for monitoring and collecting data relating to traffic on a network segment corresponding to a network application (software packages, refer to Col 1, Lines 54-67) and for analyzing the collected data for traffic information (refer to Col 6, Lines 35-67 and Col 7, Lines 1-25) utilizing a configurable (media module comprises agents which are configurable, refer to Col 5, Lines 10-25, Col 6, Lines 1-20, Col 7, Lines 40-67) media module tailored for network analysis (refer to Col 6, Lines 18-67); (b) computer code for receiving the data (refer to Col 6, Lines 1-20); and (c) computer code for analyzing the collected data and the analyzed data (refer to Col 5, Lines 1-40 and Col 6, Lines 45-67 and Col 7, Lines 1-25) for improving the performance of the network application utilizing an application server module (refer to Col 5, Lines 1-40). (d) computer code for configuring the media module in response to the analyzed data (refer to Col 7, Lines 40-67).

14. Referring to Claims 13 and 32, Sharon indicates the server module the usage of software (server computers, refer to Col 3, Lines 25-55, and software packages, refer to Col 1, Lines 54-67) wherein trigger scripts (it is inherent that software package consists trigger scripts to analysis data) are used to customize the analysis of the data (refer to Col 5, Lines 1-10).

15. Referring to Claim 15, Sharon indicates wherein the at least one media module (agents 14, refer to Col 10, Lines 4-15) preprocesses the data (gathered traffic data information, refer to Col 6, Lines 35-67) prior to receipt of the data by the application server module.

16. Referring to Claim 16, Sharon indicates wherein the application server module includes a user interface server for managing interactions with a user (refer to Col 10, Lines 14-65), an object repository coupled to the user interface server for storing objects (refer to Col 10, Lines 55-65), a configuration manager coupled to the user interface server for providing access to the objects (GUI thread 30, refer to Col 10, Lines 55-67), a remote network monitoring services subsystem (agent 14, refer to Col 11, Lines 1-15) coupled to the user interface system for providing remote access to the objects (traffic flow pattern, refer to Col 10, Lines 15-67), an expert server coupled to the object repository for analyzing data received from a media module (CME 12, refer to Col 45-67), and an administrative services subsystem coupled to the user interface server for providing administrative functions involving the objects (LMAP, refer to Col 10, Lines 55-67).

17. Referring to Claim 18, Sharon indicates wherein the at least one media module includes a data collection module for collecting data from a network segment (refer to Col 6, Lines 1-20) and prepending the data with descriptor information (CME 12, refer to Col 6, Lines 1-20), a flow processor for classifying the collected data into a plurality of flows (refer to Col 6, Lines 60-67), a capture buffer (queue, refer to Col 8, Lines 39-60) coupled to the flow processor (main thread

22) for filtering (refer to Col 8, Lines 38-60) and buffering the collected data in accordance with the flow processor, and a main processor for processing the collected data (LMAP module 18, refer to Col 8, Lines 38-60).

18. Referring to Claim 35, Sharon indicates prepending the data collected from the network segment with descriptor information (refer to Col 6, Lines 1-20), classifying the collected data into a plurality of flows (sort data, refer to Col 7, Lines 1-10), filtering and buffering the collected data in accordance with the flow processor (data parser 34, refer to Col 7, Lines 1-10), and processing the collected data (analyzer, refer to Col 7, Lines 5-55).

19. Referring to Claim 26, Sharon indicates further comprising simultaneously monitoring (multithread, refer to Col 8, Lines 39-50) different types of data (highest data rates to lowest, refer to Col 10, Lines 35-47) on multiple co-located network segments.

20. Referring to Claim 33, Sharon indicates managing interactions with a user (refer to Col 10, Lines 20-65), storing objects (refer to Col 10, Lines 55-65), providing access to the objects (display data to user, refer to Col 10), providing remote access to the objects (accessing data through times, refer to Col 10), analyzing data received from a media module (traffic data gathered by media module, refer to Col 10), and providing administrative functions involving the objects (filtering, refer to Col 10).

21. Referring to Claims 21 and 38, Sharon indicates wherein the data analysis includes gathering performance data of the application during the monitoring (refer to Col 2, Lines 25-55 and Col 6, Lines 60-67); generating a set of metrics (records, refer to Col 8, Lines 40-67) in real time based on the performance data (refer to Col 8, Lines 39-67); and measuring a performance of the application from at least one of a client perspective, a server perspective, and a network perspective based on the metrics (refer to Col 8, Lines 10-60).

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

II. Claims 12, 17, 19, 31, 34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharon et al hereinafter Sharon (US 6,137,782) and Elliott et al hereinafter Elliott (US. 6,754,181).

22. Referring to Claims 12 and 31, Sharon indicates wherein the application server module (server computers, refer to Col 3, Lines 25-55) performs several functions (refer to Col 8, Lines 25-67 and Col 9 and Col 10).

Sharon does not expressly indicate the server module indicates the accounting functions.

Elliott discloses the accounting functions (refer to Col 24, Lines 1-25)

At the time of the invention, it would have been obvious to a person of ordinary skillin the art to combine Sharon and Elliott.

The suggestion/motivation would have been that Sharon consists of network monitoring function to monitor traffic (refer to Col 6, Lines 40-67). Accounting function within network is considered to be type of traffic, it would make the system even more flexible to incorporate the accounting system within the Sharon and useful.

23. Referring to Claims 17 and 34, Sharon indicates wherein the application server module (44, refer to Fig 2) discloses a registry services subsystem for associating an object with at least one of a user and the server system (refer to Col 3, Col 4, Col 8, Col 9, and Col 10 and Fig 2) , a triggers manager for managing triggers (refer to Col 7), and a hardware services subsystem for providing communication between the server system and external modules (refer to Col 3, 4, 5 and 6).

Elliott discloses wherein the application server module includes at least one of a logging manager for storing logging information, a statistics manager for dispatching statistics, an alarm manager for dispatching alarms (refer to Col 109, 110 and 111), an event manager for dispatching events (refer to Col 111), a capture manager subsystem for creating trace files (refer to Col 99 and Col 101), a session manager for managing a user session (refer to Col 94), a security manager for providing authorization levels to users (refer to Col 93 and 94 and 95).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Sharon and Elliott.

The suggestion/motivation would have been that Sharon indicates the security of the network system (refer to Col 6). He also indicates the usage of monitoring traffic system utilizing the CME 12, servers and other network elements (refer to Col 5). It would be easier for the network management to have all the separate functions to be managed by each individual manager and process at the same time (multithread, refer to Col 8).To decrease the processing time.

24. Referring to Claims 19 and 36, Sharon indicates wherein the at least one media module performs filtering functions (refer to Col 6, Lines 60-67) and network segment (refer to Col 5, Lines 9-25). He also indicates the usage of queue for store information (refer to Col 8, Lines 35-60) and threshold (refer to Col 10, Lines 35-50). Sharon also define the system is able to determine/monitor maximum data storage (refer to Col 8, Lines 25-40).
SHARON does not expressly indicate filtering comprising: (i.) classifying the data in the network segment into multiple flows; (ii.) prioritizing the flows into high and low priority flows; (iii.) monitoring an amount of data in the high priority flows (refer to Col 20, Lines 1-45); and (iv.) reallocating resources from the low priority queue to the high priority queue if the amount of data in the high priority flows surpasses a predetermined threshold.
Elliott discloses usage of (i.) classifying the data in the network segment into multiple flows (refer to Col 19, Lines 55-67 and Col 20); (ii.) prioritizing the flows into high and low priority flows (priority tag and non-tagged, refer to Col 19, Lines 55-67); (iii.) monitoring flows (refer to Col 20, Lines 30-45); and (iv.) reallocating resources from the low priority queue to the high priority queue if the amount of data in the high priority flows surpasses a predetermined threshold (refer to Col 26, Lines 20-67 and Col 111).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Sharon and Elliott.

The suggestion and motivation for doing so would have been that Sharon indicate the system consists functionality of monitoring the traffic and filtered them according to the traffic data characteristic (refer to Col 6 and Col 7). By classify the traffic into various flows, and reallocate the resource as necessary, add the flexibility and can void traffic backlog within the system.

III. Claims 20 and 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Sharon et al hereinafter Sharon (US 6,137,782) in view of Sistanizadeh et al hereinafter Sistanizadeh (US 6,681,232)

25. Referring to Claims 20 and 37, Sharon indicates wherein the analysis of the data by the application server module includes creating reports (refer to Col 8, Lines 25-40) based on the monitored data, and output the reports to a user (refer to Col 10, Lines 35-65).

Sharon does not expressly indicate of utilizing graphs and logs as part of the reports.

Sistanizadeh disclosed utilizing graphs and logs as part of the report (refer to Col 21, Lines 1-15).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the Sharon and Sistanizadeh since Sharon disclosed the important of utilizing the reports to present the monitored data and furthermore by utilizing Sistanizadeh's system, it provides better interface for customer to understand the network better.

The suggestion/motivation would have been the by incorporate graphs and logs within the reports, provides conveniences to the user to understand the data more clearly.

***Conclusion***

**Examiner's Notes**: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen C. Tang whose telephone number is (571)272-3116. The examiner can normally be reached on M-F 7 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571)272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KT

ZARNI MAUNG
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